

# Mineral Industry Surveys

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## SULFUR IN APRIL 2007

During the month, production of recovered elemental sulfur was 650,000 metric tons (t), according to the U.S. Geological Survey. April 2007 production was 6% lower than that of March 2007 and 3% lower than that of April 2006. Shipments were 5% lower than those of March 2007. Producers' ending stocks for April 2007 were 158,000 t.

Import and export data for April 2007 were not available at the time of publication and will be published in the Sulfur in May 2007 Mineral Industry Surveys along with apparent

consumption. Imports of recovered sulfur for March 2007 were estimated to be 216,000 t; exports were 80,000 t. Imports of sulfuric acid for March 2007 were 240,000 t; exports were 27,000 t.

Significant adjustments have been made to the sulfur import data. Reports from the U.S. Census Bureau appear to underreport sulfur imports, especially material from Canada. The revised figures are based on Census information and data from personal communications with industry experts.

TABLE 1  
SALIENT SULFUR STATISTICS<sup>1</sup>

(Thousand metric tons)

Period	Production			Shipments, all sources	Ending stocks <sup>3</sup>
	Petroleum <sup>2</sup>	Natural gas	Total		
2006:					
January-December	6,960	1,430	8,390	8,290	XX
January-April <sup>r</sup>	2,180	479	2,650	2,640	XX
April	546 <sup>r</sup>	124 <sup>r</sup>	670	652 <sup>r</sup>	163 <sup>r</sup>
May	591	123	714	705	164
June	586	99	685	697	149
July	600	119	719	695	172
August	618	122	740	726	184
September	597	112	710	726	168
October	594	127	720	692	196
November	573	124	698	690	203
December	624	122	746	723	221
2007:					
January	609	111	719	747	183
February	506	106	612	582 <sup>r</sup>	210 <sup>r</sup>
March	596 <sup>r</sup>	92	688 <sup>r</sup>	706 <sup>r</sup>	205 <sup>r</sup>
April <sup>p</sup>	557	93	650	669	158
Total	2,270	402	2,670	2,710	XX

<sup>p</sup>Preliminary. <sup>r</sup>Revised. XX Not applicable.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes a small quantity from coking operations.

<sup>3</sup>Subject to inventory adjustments.

TABLE 2  
U.S. IMPORTS OF SULFUR<sup>1</sup>

(Thousand metric tons and thousand dollars)

Period	Canada		Mexico		Venezuela		Total, all countries <sup>2</sup>	
	Quantity	Value <sup>3</sup>	Quantity	Value <sup>3</sup>	Quantity <sup>e</sup>	Value <sup>3</sup>	Quantity <sup>e</sup>	Value <sup>3</sup>
2006:								
January-December	2,100	33,000	476	20,100	359	15,100	2,950	70,400
January-March	480	12,100	145	6,340	111	4,910	736	23,600
March	165	3,970	44	2,010	34	1,580	243	7,690
April	205	4,290	29	1,420	30	1,410	264	7,230
May	210	3,260	29	1,390	19	925	259	5,820
June	205	2,550	44	1,970	29	1,270	281	6,120
July	165	2,370	43	1,900	33	1,370	241	5,730
August	165	2,330	43	1,770	20	824	229	4,940
September	160	1,970	43	1,730	31	1,240	245	4,970
October	170	1,960	43	1,710	32	1,270	246	4,990
November	165	1,210	14	577	18	725	198	2,620
December	170	1,020	43	1,350	36	1,140	250	4,410
2007:								
January	170	2,480	44	1,300	23	695	236	4,500
February	145	1,670	30	1,090	20	503	195	3,290
March	170	2,010	29	661	17	376	216	3,120
Total	485	6,160	103	3,050	60	1,570	647	10,900

<sup>e</sup>Estimated.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>May include other countries not listed.

<sup>3</sup>Declared customs valuation.

Sources: U.S. Census Bureau data as adjusted by U.S. Geological Survey and PentaSul North America Sulphur Service.

TABLE 3  
U.S. IMPORTS OF SULFURIC ACID<sup>1</sup>

(Thousand metric tons and thousand dollars)

Period	Canada			Mexico			Total, all countries <sup>2</sup>		
	Quantity	Sulfur content	Value <sup>3</sup>	Quantity	Sulfur content	Value <sup>3</sup>	Quantity	Sulfur content	Value <sup>3</sup>
2006:									
January-December	1,980	647	79,200	200	64	5,100	2,430	795	91,100
January-March	553	181	22,100	58	18	1,310	700	229	25,700
March	198	65	7,760	19	6	454	255	83	9,050
April	207	68	7,910	16	5	400	234	77	9,100
May	207	68	7,840	13	4	307	229	75	8,320
June	189	62	7,030	2	1	56	208	68	7,860
July	181	59	6,290	7	2	157	228	74	6,900
August	212	69	7,330	22	7	624	245	80	8,070
September	178	58	6,850	23	8	557	201	66	7,490
October	93	30	4,650	19	6	464	122	40	5,320
November	93	31	5,440	21	7	512	154	50	6,740
December	65	21	3,710	18	6	713	109	36	5,530
2007:									
January	216	71	8,930	22	7	510	238	78	9,440
February	160	52	6,600	23	8	548	182	60	7,150
March	208	68	8,320	33	11	874	240	79	9,200
Total	584	191	23,900	78	25	1,930	661	217	25,800

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>May include other countries not listed.

<sup>3</sup>Declared customs valuation.

Source: U.S. Census Bureau.

TABLE 4  
U.S. EXPORTS OF SULFUR AND SULFURIC ACID<sup>1</sup>

(Thousand metric tons and thousand dollars)

Period	Sulfur		Sulfuric acid		
	Quantity	Value <sup>2</sup>	Quantity	Sulfur content	Value <sup>2</sup>
2006:					
January-December	635	43,800	249	80	21,800
January-March	138	11,000	75	24	5,800
March	68	4,710	23	8	2,000
April	11	1,270	19	6	1,600
May	19	2,090	17	5	1,400
June	141	8,790	11	4	1,370
July	79	4,540	18	6	2,030
August	15	2,380	37	12	2,280
September	15	1,540	11	4	1,320
October	84	4,910	20	6	1,730
November	48	2,980	9	3	1,040
December	85	4,250	32	10	3,270
2007:					
January	82	5,510	15	5	2,960
February	37	3,420	17	6	1,610
March	80	4,750	27	9	2,980
Total	199	13,700	59	20	7,540

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Declared f.a.s. (free alongside ship) valuation.

Source: U.S. Census Bureau.

TABLE 5  
U.S. CONSUMPTION OF SULFUR<sup>1</sup>

(Thousand metric tons)

Period	Domestic sources <sup>2</sup>	Imports <sup>c</sup>	Consumption
2006:			
January-December	7,660	2,950	10,600
January-March	1,850 <sup>r</sup>	736	2,580 <sup>r</sup>
March	601	243	844
April	641	264	905
May	686	259	945
June	556	281	837
July	616	241	857
August	711	229	940
September	711	245	956
October	608	246	854
November	642	198	840
December	638	250	888
2007:			
January	665	236	901
February	545 <sup>r</sup>	195	740 <sup>r</sup>
March	626	216	842
Total	1,840	647	2,480

<sup>c</sup>Estimated. <sup>r</sup>Revised.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Calculated as shipments minus exports.

TABLE 6  
RECOVERED SULFUR PRODUCED AND SHIPPED IN THE UNITED STATES,  
BY PAD (PETROLEUM ADMINISTRATION FOR DEFENSE) DISTRICT<sup>1</sup>

(Thousand metric tons)

District and source	April 2007 <sup>p</sup>		March 2007		January-April 2007 <sup>2</sup>		January-April 2006 <sup>2</sup>	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	22	22	23	23	90	90	78 <sup>r</sup>	80 <sup>r</sup>
Natural gas	1	1	1	1	4	4	5	5 <sup>r</sup>
Total	23	23	24	24	94	94	83 <sup>r</sup>	85 <sup>r</sup>
PAD 2:								
Petroleum and coke	82	81	84	85	341	343	326 <sup>r</sup>	328 <sup>r</sup>
Natural gas	4	4	4	4	14	14	13	13
Total	85	85	88	89	356	356	339 <sup>r</sup>	341 <sup>r</sup>
PAD 3: <sup>3</sup>								
Petroleum and coke	367	387	401 <sup>r</sup>	405 <sup>r</sup>	1,470	1,500	1,340 <sup>r</sup>	1,330 <sup>r</sup>
Natural gas	28	28	36	35	128	132	161 <sup>r</sup>	165 <sup>r</sup>
Total	394	416	436 <sup>r</sup>	441 <sup>r</sup>	1,600	1,630	1,510 <sup>r</sup>	1,490 <sup>r</sup>
PAD 4 and 5: <sup>4</sup>								
Petroleum and coke	87	80	89 <sup>r</sup>	93 <sup>r</sup>	365	357	427 <sup>r</sup>	411
Natural gas	61	66	52	60	256	263	300	307
California	61	61	70 <sup>r</sup>	73 <sup>r</sup>	290	278	353	339
Total	147	146	140 <sup>r</sup>	152 <sup>r</sup>	620	620	726 <sup>r</sup>	719 <sup>r</sup>
Grand total	650	669	688 <sup>r</sup>	706 <sup>r</sup>	2,670	2,710	2,650 <sup>r</sup>	2,640 <sup>r</sup>

<sup>p</sup>Preliminary. <sup>r</sup>Revised.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>May include revisions.

<sup>3</sup>Includes the U.S. Virgin Islands.

<sup>4</sup>Quantities produced and shipped in California included in petroleum and natural gas. California total shown for information purposes only.

TABLE 7  
COMPARATIVE SULFUR AND SULFURIC ACID STATISTICS<sup>1</sup>

(Million metric tons per year [annualized basis] and dollars per metric ton for period shown)

	2007			2006
	April	March	Total	total
Production	7.91 <sup>p</sup>	8.10 <sup>r</sup>	8.12 <sup>r</sup>	8.38
Shipments	8.14 <sup>p</sup>	8.31 <sup>r</sup>	8.23 <sup>r</sup>	8.29
Exports of sulfur	NA	0.94	0.81	0.63
Imports of sulfur:				
Canada	NA	2.00 <sup>e</sup>	1.97 <sup>e</sup>	2.09 <sup>e</sup>
Mexico	NA	0.34	0.42	0.47
Venezuela	NA	0.20 <sup>e</sup>	0.24 <sup>e</sup>	0.36 <sup>e</sup>
Total <sup>2</sup>	NA	2.54 <sup>e</sup>	2.62 <sup>e</sup>	2.95 <sup>e</sup>
Exports of H <sub>2</sub> SO <sub>4</sub>	NA	0.32	0.24	0.25
Imports of H <sub>2</sub> SO <sub>4</sub> :				
Canada	NA	2.45	2.37	1.98
Mexico	NA	0.39	0.32	0.20
Total <sup>2</sup>	NA	2.83	2.68	2.43
Consumption: <sup>3</sup>				
Domestic sources	NA	7.37	7.45	7.66
Imports	NA	2.54	2.62	2.95 <sup>e</sup>
Total	NA	9.91	10.10	10.60
Sulfur export values <sup>4</sup>	NA	59	69	69
Sulfur import values: <sup>4</sup>				
Canada	NA	12	13	16
Mexico	NA	23	30	42
Venezuela	NA	22	26	42
Average <sup>2</sup>	NA	14	17	24
H <sub>2</sub> SO <sub>4</sub> export values <sup>4</sup>	NA	110	128	88
H <sub>2</sub> SO <sub>4</sub> import values: <sup>4</sup>				
Canada	NA	40	41	40
Mexico	NA	26	25	26
Average <sup>2</sup>	NA	38	39	37

<sup>e</sup>Estimated. <sup>p</sup>Preliminary. <sup>r</sup>Revised. NA Not available.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes other countries not listed.

<sup>3</sup>Because April trade data were not available, April consumption was not determined.

<sup>4</sup>Average value per ton for most recent data available.